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Castle Pines, CO 80108
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castlepinesco.gov

MEMORANDUM

TO: Douglas County Board of County Commissioners

FROM: Mayor Radloff and Members of the Castle Pines City Council

DATE: August 24, 2021

RE: Partnership Request to Reconstruct Monarch Boulevard and Castle Pines Parkway in the City of Castle Pines

Request:

The City of Castle Pines is requesting to execute an IGA with Douglas County for financial participation in the reconstruction of Monarch Boulevard and Castle Pines Parkway. The reconstruction of these roads is a top issue for the residents of Castle Pines and commuters using these roads. Due to current revenue projections, the project is anticipated to take the City 13 years to complete and could have a total cost upwards of \$39,000,000. The City started construction on this project and expects to spend the project's first \$2.8 million in 2021. Beginning in 2022, the City requests that Douglas County contribute a dollar-for-dollar match to the City's annual contribution for these roads. The City anticipates a \$3 million capital appropriation in 2022, so our ask of Douglas County in 2022 would be \$3 million.

In developing this proposal, City and County staff have been working together for the last several months in the evaluation of data and confirming the information in this memo. The City Council appreciates the dedicated commitment and support of the County staff in working with our City staff to create this document and we believe it exemplifies the collaborative approach that we appreciate in Douglas County and across our local governments.

Background and Reasoning:

Monarch Boulevard and Castle Pines Parkway play a critical role in the regional mobility, safety, and economy of Douglas County. As part of the Douglas County transportation network system, these major arterials move a substantial amount of current and future residents, visitors, and goods and services within and throughout the City and County. Before the City's incorporation in 2008, Douglas County had identified the need to upgrade Monarch Boulevard from two lanes to four lanes to accommodate additional trips¹. These roadways are unique in that they serve local trips that originate and terminate within the City, but they are also utilized for "pass-thru" trips where trips originate and terminate outside of the City (i.e. emergency route when I-25 is closed, construction traffic from US-85 to I-25, general background traffic, and school-related traffic²). Monarch, by connecting Quebec and Lagae, is a parallel alternative to I-25, and Castle

¹ Douglas County 2020 Master Transportation Plan Figures 15, Summary of Roadway Recommendations and B-4, Castle Rock Area 2020 Road Network

² Douglas County School District estimates that 1,857 students outside the City of Castle Pines attend the schools of Rock Canyon, Rocky Heights, American Academy, Buffalo Ridge, Douglas County Montessori School, and TimberTrail. These students do not utilize bus service and these trips occur twice a day, morning and afternoon, and require Castle Pines Parkway and Monarch Boulevard to complete the trip.

Pines Parkway, lacking the traffic circles and wildlife activity of Happy Canyon, is the most viable connector for I-25 and US85. In addition to providing safe routes through the City for County citizens, it is also in the County's best interest that these routes are brought back to and remains in good driving condition for all County residents who use these roadways to traverse north and south between south-metro Denver and Douglas County.

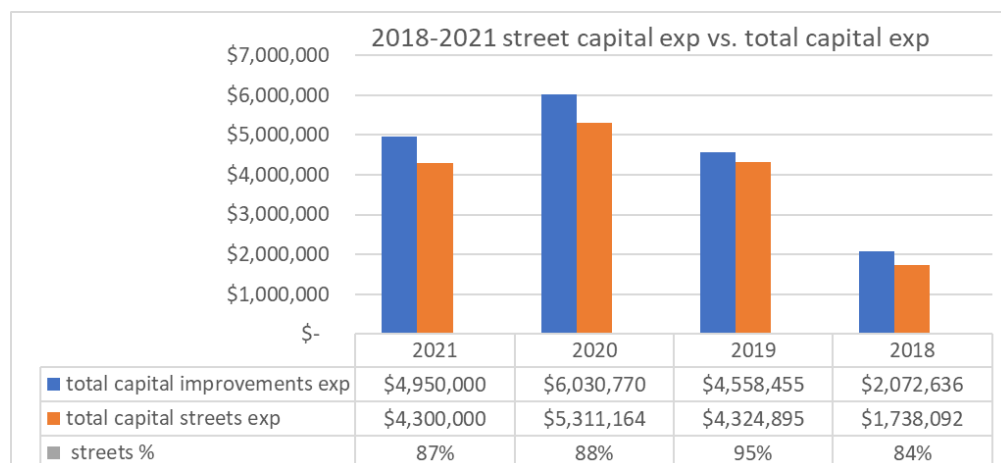
When the City was incorporated in 2008, the ownership and maintenance responsibilities of these roadways were transferred to the City. Construction of these roadways commenced in 1985 and was completed over an estimated 10-year timeframe. These roadways have outlived their lifespan and routine maintenance is becoming cost-prohibitive. Therefore, reconstruction and rehabilitation of the majority of these roadways are necessary and in the best interests of the City and the County. These interests include reliable infrastructure to maintain the regional transportation network, continued economic growth, higher property values, safety, and fiscally prudent infrastructure investment.

In addition, the justification for this request is substantiated by the fact that Castle Pines is now seeking a similar partnership and fiscal participation that Douglas County has demonstrated with other municipalities by partnering with for roadway projects in Douglas County. An analysis of this is provided below.

Analysis:

City's Commitment to Improving City Roadways

As illustrated in the chart below, the City has directed a significant percentage of its annual capital expenditures to roadway improvement activities over the last 3 years. In 2018, the City spent \$1.7 million, and for 2019, 2020, and 2021 that amount was increased to an average of \$4.6 million. For 2018, 2019, and 2020, the primary focus was the residential roads, which were very similar in age and shape as Castle Pines Parkway and Monarch Boulevard.

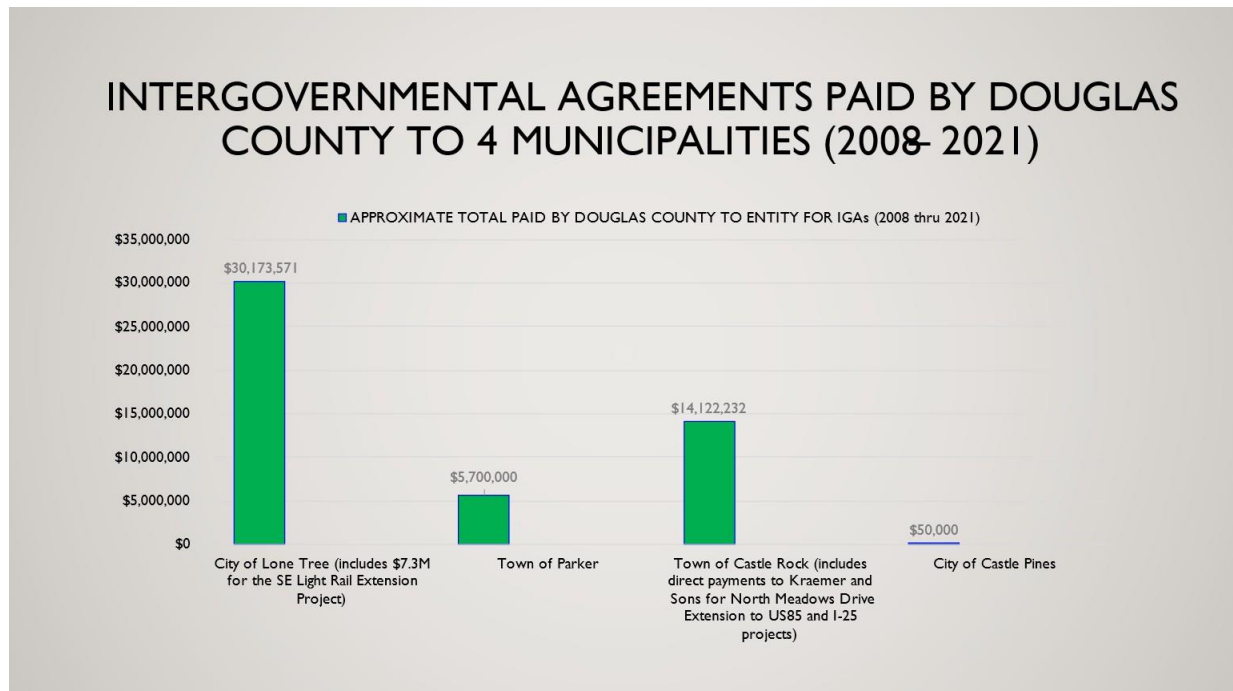


Of the \$4.3 million budgeted in 2021, the City allocated \$2.8 million to the full reconstruction of Castle Pines Parkway from Yorkshire to Monarch Boulevard. This reconstruction also began the City's shift from concrete to asphalt for the majority of Castle Pines Parkway and Monarch Boulevard.

County Participation with Other Municipalities for Roadway Projects

In addition, an analysis prepared by the County (see table below), conducted between 2008 and 2020, showed Castle Pines has received only \$50,000 in capital improvement assistance from the County. By way of comparison, the City has received 0.1% of what Lone Tree, Parker, and Castle Rock

have received, which totals over \$47.7 million in combined assistance (see attached analysis - 2008-2020 IGA Spreadsheet of jurisdictional projects).



Source: Douglas County

Looking to the future, the County projects \$274.7 million in future capital improvements in their 2021 through 2025 Capital Improvement Plan, none of which is located within the City (see attached Douglas County 5-Year Capital Improvement Planning Documents).

Costs to Reconstruct Castle Pines Parkway and Monarch Boulevard

As illustrated in the table and map below, the majority of Castle Pines Parkway and Monarch Boulevard require complete reconstruction or rehabilitation. The City estimates that this will cost \$38.8 million, and based upon the City's current projected revenues this will take 13 years to complete. While this is a 2022 request, should the County support this request, the City would anticipate asking in future years as well. Should the County participate through the total duration of the project it would take 6 years to complete and cost \$31.8 million saving the greater community over \$7 million.

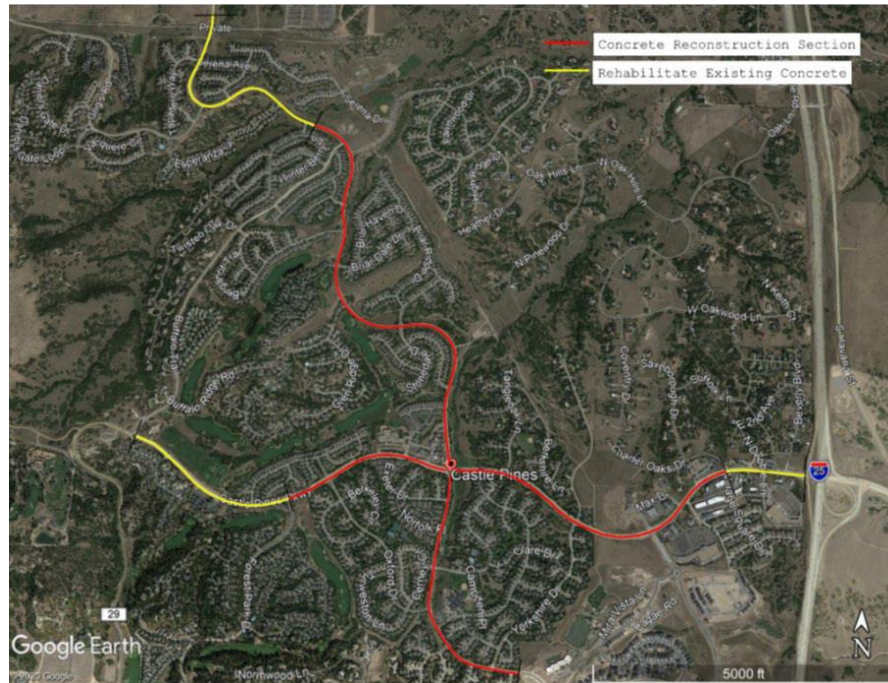
Sincerely,

DocuSigned by:

Tera Stave Radloff

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Tera Stave Radloff, Mayor, City of Castle Pines



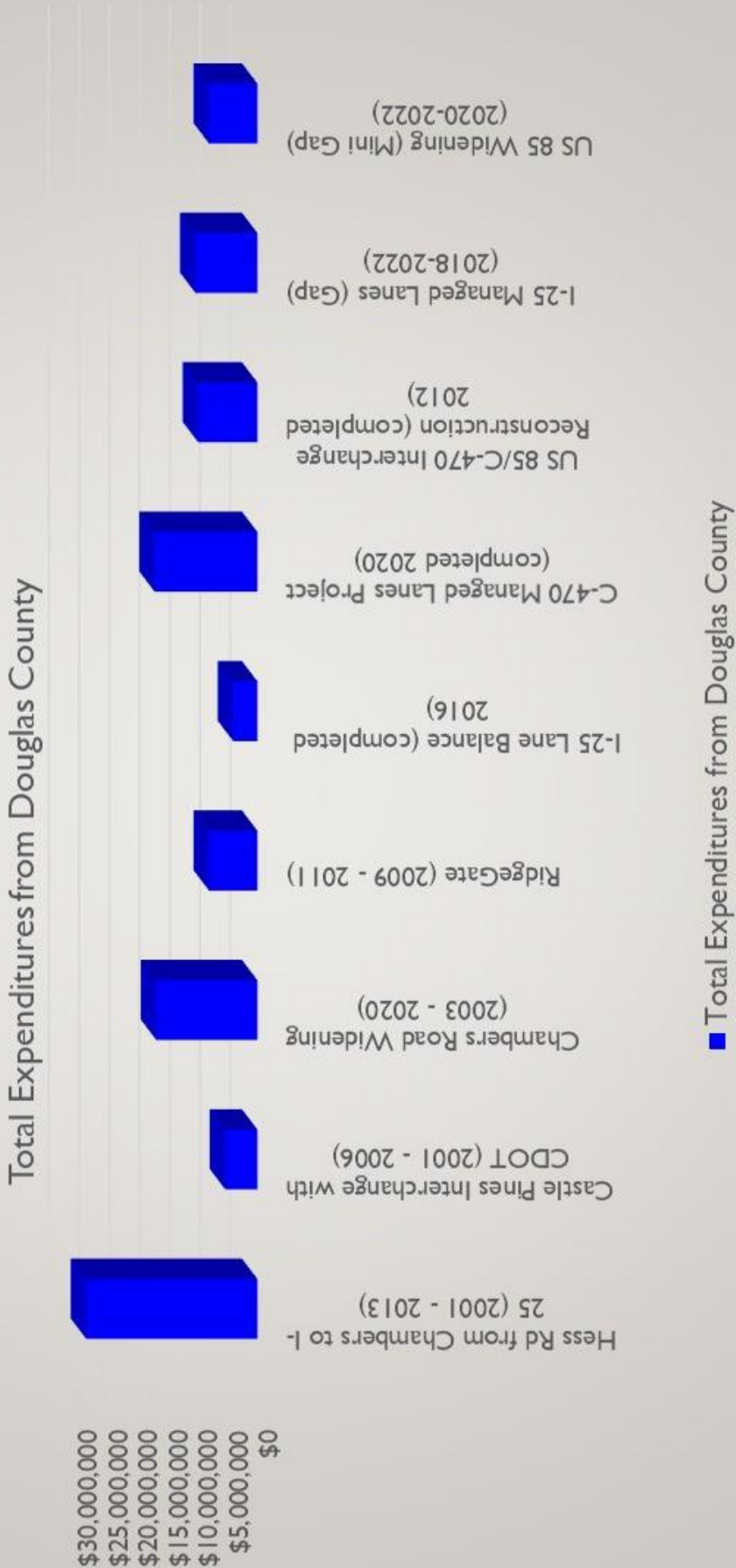
Castle Pines Parkway and Monarch Reconstruction Cost and Timeline

Castle Pines Capital Investment			Douglas County / Castle Pines Joint Capital Investment			
Year		City investment	Year		City investment	County investment
2021	CPP	\$ 2,800,000	2021	CPP	\$ 2,800,000	\$ -
2022	CPP	3,000,000	2022	CPP	3,000,000	3,000,000
2023	CPP	3,000,000	2023	CPP/Monarch	3,000,000	3,000,000
2024	CPP/Monarch	3,000,000	2024	Monarch	3,000,000	3,000,000
2025	Monarch	3,000,000	2025	CPP	3,000,000	3,000,000
2026	Monarch	3,000,000	2026	Monarch	<u>2,500,000</u>	<u>2,500,000</u>
2027	Monarch	3,000,000			\$ 17,300,000	\$ 14,500,000
2028	CPP	3,000,000				
2029	CPP	3,000,000				
2030	CPP	3,000,000				
2031	Monarch	3,000,000				
2032	Monarch	3,000,000				
2033	Monarch	3,000,000				
Total Construction Cost		\$ 38,800,000	Total Construction Cost		\$ 31,800,000	
Total Construction Time (Years)		13	Total Construction Time (Years)		6	
				Total Cost Savings with Partnership	\$ 7,000,000	
				Total Years Saved with Partnership	7	

Attachments:

- 2001 to Present graph of large projects (prepared by Douglas County)
- Douglas County 5-Year Capital Improvement Planning Documents (prepared by Douglas County)

LARGE PROJECTS THAT DOUGLAS COUNTY FUNDED THAT DIRECTLY BENEFITED TOWNS AND CITIES (2001 TO PRESENT)



Updated: July 16, 2021

DRAFT - Capital Improvement Program (CIP) Five Year Budget Project Priorities (2022 thru 2026) - Subject to Change and BOCC Final Approval**Project Description & Funding Information****2021****2022****2023****2024****2025****2026****BU****2040
TMP****Fund 225 - Infrastructure Fund****balance on
07/06/2021****2022****2023****2024****2025****2026**

801201	2020	US 85 Improvements (HR Pkwy to C-470 to north of CLR), see Fund 230 - BU 800998 for additional project allocations	28,000,000	-	-	-	-	-
801202	Safety	US 85 Improvements (Daniels Park Road Intersection), see Fund 230 - BU 800998 for additional project allocations	400,000	-	-	-	-	-
801203	Study	Relocate West I-25 Frontage Road	756,257	-	-	-	-	-
801205	Safety	SH 83 Safety Improvements (Bayou Gulch Road to Palmer Divide Road) - CI 2020-026	26,261	-	-	-	-	-
Fund 230 - Subtotal for CIP:			29,182,518	-	-	-	-	-

Fund 230 - Road Sales and Use Tax Fund**(from 4/10's of one cent sales and use tax for transportation)****balance on
07/06/2021****2022****2023****2024****2025****2026**

800129	2030	Relocate I-25 West Frontage Road (Tomah to Territorial), CI 2020-015, Required for New Interchange (see BU 800979)	-	-	-	7,000,000	-	-
800131	2030	Hess Road Widening to 4 thru lanes (Canyonside Blvd to Chambers Road), \$450,000 needed for Traffic Signal at Havana in 2023	-	-	450,000	-	-	-
800132	Ongoing	Best Road Improvements	-	-	-	1,500,000	-	-
800156	2030	Hilltop Road (Legend HS to Merryvale), CI 2020-029 - \$26 M still needed for design, ROW, utilities & construction - use \$5M from Fund 235	2,154,200	3,500,000	13,600,000	-	-	-
800156	2030	Hilltop Road (Merryvale to Singing Hills to Flintwood), CI 2020-029 - still need \$18 M	-	-	-	1,000,000	16,000,000	-
800202	2030	Bayou Gulch Road Extension - initial 2 lanes (Pradera Parkway to Scott Road), \$3.7 M from DC	10,521	3,700,000	-	-	-	-
800205	2020	C-470 Trail at Yosemite Street, (\$2 M from DRCOG & possible \$100 K from PMMD not shown here)	3,563,634	-	-	-	-	-
800262	2030	Lincoln Corridor (Park Meadows Drive to Parker Road)	349,639	-	-	-	-	-
800267	2030	Waterton Central (Rampart Range Road to Moore Road), (Waterton Ext. Phase 2) - to be increased by \$3.3 M pending BOCC action on July 27, 2021	12,769,689	-	-	-	-	-
800269	Safety	County Line Road / I-25 Operational Improvements (East of I-25), amount shown reduced by \$4 M to reflect pending BOCC action on July 27, 2021	1,416,360	-	-	-	-	-
800308	2020	US 85 (Highlands Ranch Parkway to C-470), shows actual SR Revenue recd. includes \$5,293,583 + \$625,456 thru Dec. 31, 2020	5,293,583	-	-	-	-	-
800308	2020	US 85 (HR Pkwy to C-470) Sterling Ranch Commitment - (estimate shows \$5 M / yr in new revenue - appears as negative value)	-	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
800308	2020	US 85 (Highlands Ranch Parkway to Titan Road), \$4 M total (using Sterling Ranch Revenue)	-	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
800403	Safety	SH 83 - Parker North Operational Improvements, \$4 M Total, \$500,000 from DC per TIP	500,000	-	-	-	-	-
800404	Safety	4 Corners Intersection - Castle Rock (SH 86, 5th, Founders & Ridge), \$6.5 M Total, \$1 M from DC per TIP	-	1,000,000	-	-	-	-
800405	Safety	C-470 Multi-Modal Trail over Acres Green Drive CI 2019-013, \$4.2 M total, \$225,000 design & \$1 M for construction from DC per TIP	19,981	1,000,000	-	-	-	-
800409	2030	Moore Road Improvements (Titan to Waterton Extn) CI 2021-031 funds used for partial contribution from DC shown to partner with SR	-	-	-	-	-	1,000,000
800424	Safety	Jackson Creek Road over West Plum Creek Bridge Replacement	156,999	-	-	-	250,000	4,500,000
800425	Safety	Dakan Road over West Plum Creek Bridge Replacement	24,999	-	-	-	250,000	4,500,000
800426	Safety	Meridian / Havana / Lincoln - need \$8.5 M (\$2.65m SPIMD & \$1.9m BU 800100 & \$0.6m BU 800916 not shown here)	385,959	3,000,000	-	-	-	-
800431	Safety	Crystal Valley over Sellers Gulch Bridge Improvements, CI 2020-034	24,000	-	-	250,000	1,000,000	-
800432	Safety	Inverness Drive South Bridge Improvements, CI 2020-035	24,003	-	-	250,000	1,000,000	-
800434	Safety	Broadway / HR Parkway Intersection, CI 2021-024 (HSIP federal funded project)	-	-	750,000	-	-	-
800451	Safety	SH 83 Safety Improvements, (Bayou Gulch Road to Palmer Divide Road), see Fund 235	900,000	-	-	-	-	-
800453	2030	Dransfeldt Road Extension (20 Mile Rd to Motsenbocker), CI 2017-023, \$16 M Total, \$8 M from DC, see Fund 235	-	-	4,000,000	-	-	-
800461	2030	County Line Road (University to Broadway), \$5 M required from DC of \$20 M total for construction	214,417	5,000,000	-	-	-	-
800464	2020	Pine Lane Improvements (Dixon Drive to Pine Drive), CI 2017-019	1,127,701	800,000	-	-	-	-
800505	2030	Happy Canyon / I-25 Interchange - Phase 1 - West Side Connection, (also see Fund 235 for Phase 2 - East Side Connection)	-	-	-	-	-	8,000,000
800721	2030	Crowfoot Valley Road Improvements, CI 2020-039 (also see funding in Fund 235, BU 801510)	85,000	-	-	-	-	-
800770	2030	Pine Drive (Lincoln to Inspiration), \$14 M Total needed (\$2 M for design, ROW & IREA) - amt shown reduced by \$1 M pending BOCC action on July 27, 2021	2,080,841	1,000,000	-	-	-	-
800833	Safety	Traffic Signal and Intelligent Transportation Upgrades	3,006,387	500,000	1,200,000	1,000,000	1,500,000	2,000,000
800855	Safety	Highlands Ranch Transportation Improvement Projects (aka HR TIP) - also see BU 800434 for HRP/Broadway HSIP project	818,214	-	-	-	-	-
800863	2030	Meridian Intersection Improvements - option to use for Reconstruction in fall 2021 and replenish in 800100 in 2022	31,702	-	-	-	-	-
800957	2020	US 85 / C-470 Interchange Reconstruction (C-470 to Dad Clark Gulch)	49,959	-	-	-	-	-
800979	2030	Crystal Valley Interchange w/ Relocated Frontage Rd (also see Fund 230, BU 800129), \$80 M Total Required	-	-	-	9,000,000	-	-

Updated: July 16, 2021

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BU	2040 TMP	FUND 235 - Transportation Infrastructure - 0.18 Sales & Tax	balance on 07/06/2021	2022	2023	2024	2025	2026
801502	2020	US 85 (HR Pkwy to CLR), augments Fund 230 BU 800998	8,000,000	-	-	-	-	-
801503	Safety	SH 83 (Bayou Gulch Road to Palmer Divide Road), augments Fund 230, BU 800451 (\$3.5 M match per DRCOG TIP grant)	-	-	4,000,000	-	-	-
801503	Safety	SH 83 Widen at Park Drive and Rafter Road Intersections (unsuccessful in 2011 HSIP 90/10 grant) - see Fund 230, BU 800451	-	-	-	1,000,000	-	-
801504	2030	Pine Drive Widening (Lincoln Avenue to Inspiration Drive), augments Fund 230, BU 800770	-	10,500,000	-	-	-	-
801505	2030	Lincoln Avenue (Jordan to Parker Road) CI 2020-017 - augments Fund 230, BU 800262	-	500,000	-	7,000,000	-	-
801506	2030	Dransfeldt Road Extension (20 Mile Rd to Motsenbocker), CI 2017-023, augments Fund 230, BU 800453	-	500,000	4,000,000	-	-	-
801507	2030	Safer Main Streets - C-470 Trail Connection to Park Meadows Station, CI 2021-035 (DC contribution fixed)	300,000	-	-	-	-	-
801507	2030	Safer Main Streets - US 85 Shoulder Project (Daniels Park Road to Castle Rock Parkway) - \$200 K for Design & \$300 K Constr & CM Testing	500,000	-	-	-	-	-
801507	2030	Safer Main Streets - C-470 Trail over University (SH177) - \$500 K for Design in 2021	3,197,000	-	-	1,500,000	-	-
801508	2030	I-25 / Lincoln Interchange (Park Meadows to Oswego w/ grade separation at Havana), see Fund 230, BU 800262	-	-	-	2,000,000	-	7,000,000
801510	2030	Crowfoot Valley Road Improvements, CI 2020-039 (Founders Parkway to Canyonside Blvd), \$2 M from DC	-	1,800,000	-	-	-	-
801510	2030	Crowfoot Valley Road Improvements, CI 2020-039, (Canyonside Blvd to 2nd Access into Canyons South),	-	-	-	-	2,000,000	-
801512	2030	Crystal Valley Interchange w/ Relocated Frontage Rd to Tomah, augments Fund 230 BU 800979 & 800129	-	-	-	-	6,000,000	-
801513	2040	Happy Canyon / I-25 Interchange, CI 2012-011 - East Side - augments Fund 230, BU 800505	-	200,000	-	1,500,000	-	5,500,000
801514	2030	Hilltop Road / Singing Hills Road Improvements, CI 2020-029, augments Fund 230, BU 800156	-	-	6,000,000	1,000,000	6,000,000	-
801519	2039	Waterton Trail over South Platte River (connects High Line Canal at Campfire to Chatfield State Park), \$7 M Total needed	-	-	-	-	-	500,000
801519	2039	Waterton Widen & Replace Bridge (Wadsworth to Campfire), \$24 M Total needed	-	-	-	-	-	1,000,000
Fund 235 - Subtotal:			11,997,000	13,500,000	14,000,000	14,000,000	14,000,000	14,000,000
Amount available for Capital Improvement Priorities:			check	\$13.5 M	\$14.0 M	\$14.0 M	\$14.0 M	\$14.0 M